TABLE 5.—*Maximum free-air wind velocities, meters per second, for different sections of the United States, based on pilot-balloon observations during November 1937*

Section	Surface to 2,500 meters (m . s. l.)					Between 2,500 and 5,000 meters (m. s. l.)					Above 5,000 meters (m . s. l.)				
	Maximum velocity	Direction	Altitude (m) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m) m. s. l.	Date	Station
Northeast [1]	38.6	WSW	2,230	9	Kylertown	43.1	NW	4,990	6	Buffalo	44.4	NW	5,170	6	Buffalo.
East-Central [2]	38.0	WSW	720	14	Knoxville	41.2	SW	4,420	14	Washington	56.4	WSW	6,510	7	Knoxville.
Southeast [3]	30.2	W	2,200	14	Atlanta	40.0	W	4,420	20	Jacksonville	49.6	WSW	10,360	30	Jacksonville.
North-Central [4]	37.7	WNW	620	2	Detroit	33.2	WNW	3,430	5	Fargo	38.8	WSW	10,910	11	Detroit.
Central [5]	38.6	SW	2,260	25	Chicago	43.2	W	3,760	2	Indianapolis	48.8	WNW	8,510	3	Evansville.
South-Central [6]	30.6	NW	2,500	14	Memphis	38.0	NW	3,950	14	Memphis	42.5	W	11,250	5	Abilene.
Northwest [7]	36.8	SW	1,590	8	Spokane	45.0	NNW	4,900	26	Boise	39.0	NW	5,730	26	Spokane.
West-Central [8]	26.4	NW	2,040	28	Denver	50.2	SW	3,600	23	Reno	54.4	W	10,400	12	Modena.
Southwest [9]	34.1	WSW	1,380	8	Havre	40.8	WSW	4,080	11	Las Vegas	52.8	WNW	7,040	21	Albuquerque.

[1] Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and Northern Ohio.
[2] Delaware, Maryland, Virginia, West Virginia, southern Ohio, Kentucky, eastern Tennessee and North Carolina.
[3] South Carolina, Georgia, Florida, and Alabama.
[4] Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.
[5] Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.
[6] Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and western Tennessee.
[7] Montana, Idaho, Washington, and Oregon.
[8] Wyoming, Colorado, Utah, northern Nevada, and northern California.
[9] Southern California, southern Nevada, Arizona, New Mexico, and extreme west Texas.

RIVERS AND FLOODS

[River and Flood Division, MERRILL BERNARD in charge]

By BENNETT SWENSON

Precipitation was deficient over most of the country during November. However, widely scattered regions received amounts considerably above the normal for the month. Thus, in a narrow belt along the Atlantic coast, in northeastern Texas and adjacent areas, and in the North and Central Pacific States, heavy precipitation occurred, the amounts being exceedingly heavy in portions of Oregon and northern California.

The excess precipitation along the Atlantic coast and over the Texas region resulted in light floods over portions of these areas. The crests of these rises are shown in the table below. No damage of any consequence occurred.

A series of storms occurred from about the 5th to the 27th of November over the North Pacific States, resulting in exceedingly heavy precipitation over the northern portion of the Sacramento Basin in northern California and over the Willamette Basin in Oregon and in adjacent regions.

The heaviest rainfall reported in the Sacramento Basin was 29.08 inches between the 10th and 24th at Kennett, Calif., and the greatest 24-hour amount at that place was 5.64 inches on the 20th. The stages in the Sacramento River from Red Bluff, Calif., to the mouth of the Feather River were not only by far the highest of record for November but equaled the high stages that usually occur only in midwinter and early spring. However, flood stage was exceeded only at Red Bluff, Calif., where the highest stage of 24.4 feet occurred on the 20th. The total loss resulting from the flooding is estimated at $97,000.

In the Willamette River Basin the greatest amount of precipitation recorded during November was 19.63 near Corvallis, Oreg. At Valsetz, Oreg., located a short distance west of the Coast Range Divide, a monthly total of 33.03 inches was measured. Of this 6.00 inches occurred on the 8th, preceded by 1.56 inches on the 7th, and followed by 1.41 inches on the 9th. There were 12 days with 1.00 inch or more of precipitation at this station.

Notwithstanding the excessive precipitation over the Willamette Basin, only three stations reported gage readings above flood stage, namely, Leaburg, Oreg., on the McKenzie; Jefferson, Oreg., on the Santiam; and Monroe, Oreg., on the Long Tom River. No damage was reported.

Estimates of losses that occurred in the flood in the Monongahela and Ohio Rivers during October, received too late for inclusion in the October REVIEW, are as follows: Monongahela River, $90,500, and Ohio River at Pittsburgh, Pa., $10,000.

CORRECTION TO JUNE REPORT

Page 248, table and chart showing precipitation in Pecos River Basin from May 23 to June 6, 1937:

Precipitation recorded for "Alamogordo Dam" occurred at Alamogordo, in Otero County, in southern New Mexico. No data are available for Alamogordo Dam. Table and chart should be corrected accordingly.

Table of flood stages in November 1937

[All dates in November unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE	*Feet*			*Feet*	
Tioughnioga: Whitney Point, N. Y.	12	12	13	13.1	12
James: Columbia, Va.	10	(1)	1	(2)	(2)
Roanoke: Williamston	10	(1)	9	(2)	(2)
		18	20	10.1	19
Santee:					
		(1)	7	13.3	4, 5
Rimini, S. C.	12	10	15	13.4	14
		17	21	13.2	19, 20
		(1)	8	(2)	(2)
Ferguson, S. C.	12	11	22	12.7	14, 15, 20, 21
MISSISSIPPI SYSTEM					
Arkansas Basin					
Petit Jean: Danville, Ark.	20	11	14	23.0	12
Red Basin					
Sulphur:					
Ringo Crossing, Tex.	20	10	13	22.8	10
		16	17	21.8	16
Naples, Tex.	22	18	24	23.7	22
PACIFIC SLOPE DRAINAGE					
Sacramento Basin					
Sacramento: Red Bluff, Calif.	23	20	21	24.4	20
Columbia Basin					
McKenzie: Leaburg, Oreg.	12	19	20	12.2	19
Santiam: Jefferson, Oreg.	10	20	20	10.6	20
		26	26	10.6	26
Long Tom: Monroe, Oreg.	10	22	26	12.8	25

[1] Continued from previous month.
[2] Crest occurred in October.